

BRIDGING THE DATA DIVIDE

Successful Navigation Through The
World of Data Overload

*Prepared by
Benjamin L Cella
Director, Business Intelligence and Data Analytics*



Table of Contents

A Brief Introduction to Data Overload	2
The New Data Mandate	3
Domino’s Pizza – A Tech Company?	3
The Impact of Doing Nothing	4
A New Vision of Data	5
Refining the Data Gold Rush	6

© 2020 Teksouth Corporation, All Rights Reserved.

This document is provided “as-is.” Information and views expressed in this document, including URL and other internet website references, may change without notice. You bear the risk of using it.

This document does not provide you with any legal rights to any intellectual property or any Teksouth product. You may copy and use this document for your internal, reference purposes.

Teksouth

Bridging The Data Divide White Paper

May 2020

A Brief Introduction to Data Overload

The “3 V’s of Big Data”, we’ve heard about volume, variety, and velocity for years, but what does it mean today? The amount of data being produced is greater than any time in history. An IBM study from 2017 outlines that 90% of data in world had been created in the previous two years. By 2025, it’s estimated that 463 exabytes of data will be created each day globally – that’s the equivalent of 212,765,957 DVDs per day! The number of sources the data is originating from is also growing. The average system life cycle, from sunrise to sunset, is 4 to 6 years. Even the larger systems that are less susceptible to that timeline continually deliver new and different reports that also needs to be integrated into existing data sets. All of this data is now being produced at real-time or near real-time.

Retroactively mining and cleaning data from disparate locations can drain massive volumes of resources for companies operating at scale. This is what we refer to as data overload.

Data overload creates a data divide between those who store and curate data, and those who analyze and share findings. Bridging this divide requires a different understanding of data... A different set of best practices, strategies and process to effectively utilize data.

An overview of the effects of data overload trends, demonstrates how vital it is for forward-leaning organizations to successfully navigate their data:

Executives

44% of leaders say their analytics teams spend **more than half their time** accessing and prepping data rather than performing actual analytics*



Data Professionals

3 in 5 say it takes days or weeks to access all the data they need*

48% lack the confidence in and question the accuracy of their data*

Establishing a bullet-proof methodology for Big Data cataloging, storage and securing requires an advanced IT architecture that falls outside the scope of most organization’s internal IT capabilities

World Economic Forum

*TMMData and Digital Analytics Association Survey

The New Data Mandate

Henry Ford once said, “If you always do what you’ve always done, you’ll always get what you always got,” Henry Ford was referring to the assembly line that he pioneered, but his quote holds true today. Technology continues to evolve. Our ways of processing, viewing and interpreting our data must evolve as well.

As this uniquely modern practice becomes normalized across all industries, it is being widely portrayed as a data gold rush—and with good reason: there is significant value lying in the vast repositories of data that we are only just beginning to mine.

Top performing organizations are
5 times more likely
to embrace a data driven
analytics culture
MIT Sloan Management Review Survey

A MIT Sloan Management Review survey of nearly 3,000 executives, managers and analysts across more than 30 industries and 100 countries revealed several key findings. One such finding stated that top performing organizations are five times more likely to embrace a data driven analytics culture than lower performing organizations.

There are many examples in the not so distant past of organizations that have not seen the need or embraced the transition to a data driven culture. Almost all of these organizations have paid a heavy price. There are also examples of organizations that have completely transformed their business by successfully transitioning to a data driven and analytics culture.

Domino’s Pizza – A Tech Company?

Patrick Doyle became CEO in 2010 after some distressing years and their stock price was a modest \$8.76 per share. Today Domino’s has over 17,000 locations in 90 countries and their stock price is over \$372 per share. How did they do it?



Starting in 2010 Domino's began transforming from merely a pizza-making company to a technology driven pizza delivery company. Doyle emphasized, "We are as much a tech company as we are a pizza company."

By 2016, over half of the 800 employees at their Ann Arbor, Michigan headquarters worked in software and analytics. This emphasis on technology has changed how Domino's interacts with customers. 58 percent of customer orders are now via online systems (Domino's app, directly via twitter, smart watches, TVs, smart speakers, or even by texting an emoji). Customers also have the ability to monitor the status of their order using these same technologies.

These changes have also altered the way Domino's manages its operations. Gone are the days of simply processing sales data and operational metrics. They now combine data collected from their digital platforms and other internal systems with a large number of third-party sources, such as the United States Postal Service, as well as geocode information, demographic data and competitor data, to allow for an in-depth customer breakdown.

Domino's belief that being a data driven company gives them the competitive advantage has paid off. In their fourth-quarter, 2017, earnings report, Domino's proclaimed it is now the largest pizza chain in the world.

From revolutionary ordering channels to a devotion to advanced customer analytics, Domino's has continued to keep up with the latest technological trends. It is also clear that the company will continue to place a high priority on data and analytics.

The Impact of Doing Nothing

Ineffective data management presents tangible harm to businesses, and it's far more widespread than most expect. When data resides in multiple, disparate locations, its often inconsistent and poorly organized.

79% of enterprise executives say that not embracing their data
will cause their companies to lose competitive position and risk extinction

Forbes (2018)

82% of B2B marketers and sellers said that managing the
volume, variety and velocity of data is moderately to extremely challenging

Dun and Bradstreet

80% of companies report high or moderate degrees of data silos

CompTIA

The most important lessons Patrick Doyle brought to Domino's are about the mindset required for organizations to do big things in tough fields. Two of the great harms of executive life are what he refers to as omission bias and loss aversion. Omission bias is the tendency to worry more about doing something than not doing something. This is because everyone sees the results of a move gone badly and few see the costs of moves not made. Loss aversion describes the tendency to avoid losing rather than trying to win. The natural inclination is to be cautious, even in situations that demand creativity.

A New Vision of Data

The new vision of data changes expectations. Professionals at all levels now desire to go to work in a data driven culture, cutting through noise and getting to the facts. They need actionable insights. Actionable insights look beyond the numbers. They allow organizations to not only discover problems, but also discover opportunities. Instead of outdated information and manual slide decks, organizations leverage real-time tools with agile business intelligence models.



Old World

- Manual data extracts
- Labor intensive manual integration
- Outdated information
- Manual slide decks
- Anxiety integrating new data sources



New World

- Trusted data automatically delivered
- Rapid extract, load and transform process
- Real-time tools
- Agile business intelligence models
- Embracing new data sources for new insights

Actionable insights lead organizations to the root causes keeping them from achieving their key performance indicators. This drives organizations to affect the news rather than reporting it.

ACTIONABLE INSIGHTS



Actionable insights require services that are fast, agile, flexible, and innovative. Achieving these services requires the support of a team of the most seasoned and specialized professionals with the knowledge and experience to organize, catalog and secure the needed data. For more than 37 years, Teksouth has made it our mission to deliver capabilities that enable our clients to do more than simply “manage” their data, to actually utilize it.

Refining the Data Gold Rush

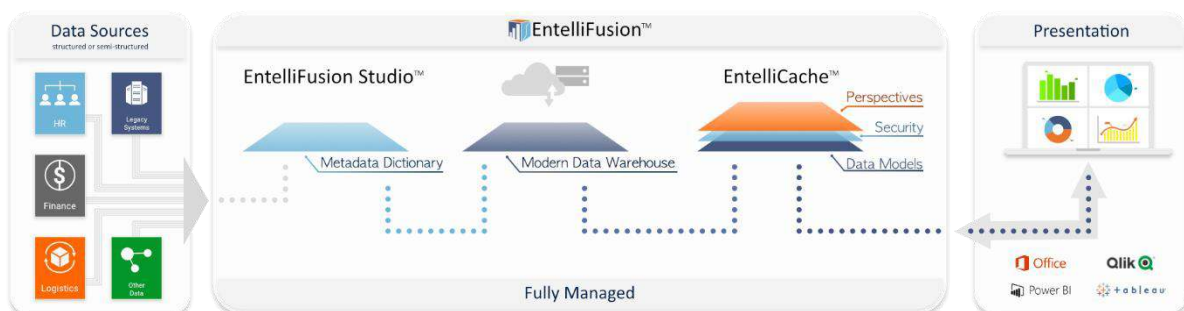
In the rush to acquire as much analytical insight as possible, organizations have focused much of their energy and resources on raw data capture without realizing the need for an organized functional system capable of storing, curating and securing that data. Operations that prioritize data-harvesting are now facing a challenge that is also in line with the data gold rush analogy: gold—in its natural state—isn’t close to its peak value. It requires highly specialized processing and refinement to become market-ready. Unfortunately, shaping data is not a simple process. Retroactively mining, cleaning and securing data from disparate locations can drain massive volumes of resources for companies already operating at capacity.

Without proper, holistic shaping and integration, this segregated data can present misleading or conflicting information, and lead to detrimental business decisions.

Where, then, can organizations turn to ensure that their data is being collected methodically, and in a format that lends itself easily to deep insight and analysis?

Responding to this need for organized, secure data management, Teksouth is bringing their centralized enterprise decision support platform to the commercial marketplace.

Teksouth’s EntelliFusion is a comprehensive, fully managed, end-to-end decision support platform. Until now, EntelliFusion has solely been applied to federal agency, enterprise-wide, decision support. As such it natively aligns with government and educational agencies’ needs for high-level data availability and rigorous security.



EntelliFusion deftly addresses the challenges posed by data siloing, providing a platform that integrates data from varying sources and enables modelling for powerful insights and AI applications.

Teksouth

*Bridging The Data Divide White Paper
May 2020*

It does so through an advanced ETL engine and modern data warehouse that guarantees scalability, performance, and reliability. This ETL architecture allows EntelliFusion to model data from disparate sources effectively and account for the changing properties of these sources.

EntelliFusion's technology was "military-born"—it has proven successful against the strenuous demands of the USA's top echelon of military operations. In this capacity, it was massively scaled across the DOD for over twenty years. In one instance, EntelliFusion has successfully managing financial and operational data analytics and decision support by integrating nineteen different systems for nearly 15,000 users running more than 30 million ad-hoc queries annually—all with 99.99% uptime over the last 15 years of operation. EntelliFusion is built on the latest Microsoft technologies and frameworks which allows it to be continually enhanced and innovated.

As a partner to the Department of Defense, EntelliFusion meets the world's highest compliance requirements, while providing a solution that customizes to any organization's specific data requirements and needs. It is data agnostic, infinitely scalable, and guarantees accuracy and performance to promote end-user tool adoption. EntelliFusion can be hosted in the cloud or on premise. It is the first place to begin future readiness to facilitate artificial intelligence & machine learning capabilities across an enterprise.

If your business or agency is ready to strategically maximize its data relevance and prepare it for seamless analytical insight, reach out to Teksouth about EntelliFusion.



EntelliFusion and the EntelliFusion logo are trademarks of Teksouth Corporation

Headquarters, 1420 Northbrook Drive, Gardendale, AL 35071
Phone: 205.631.1500 toll-free in the US: 1.800.842.1470 www.teksouth.com